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~~26~~. (Twice Amended)

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~~33~~, wherein said [softening step includes subjecting said wear layer to a sufficient softening temperature of about 195°C to 215°C] mechanical embossing occurs when said second layer is in a softened state.

<sup>9</sup>  
~~47~~. (New) The method of claim ~~33~~, wherein said second layer and said wear layer are the same layer.--

#### REMARKS

##### I. Status of the Claims

Claims 25, 26 and 33-47 are currently pending. Applicants have amended claims 25 and 26 in response to the 35 U.S.C. §112, second paragraph issues raised by the Examiner. Support for these amendments can be found in previously canceled claims 22-24. New claim 47 has been added to further define and protect Applicants' invention. No new matter has been added by the amendments.

##### II. Rejection Under 35 U.S.C. § 112

The Examiner rejected claims 25 and 26 under 35 U.S.C. §112, second paragraph as failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The reasons for rejection, i.e., a lack of antecedent

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basis, is rendered moot by the above amendments. Applicants therefore respectfully request that the rejections under §112, second paragraph be withdrawn.

**III. Rejection Under 35 U.S.C. § 103**

The Examiner rejected claims 25, 26 and 33-46 under 35 U.S.C. §103 as being unpatentable over Japanese reference 1-110123. The Examiner asserts that the claimed invention would have been obvious in view of the Japanese reference because this reference discloses or suggests the basic claimed process, including chemically embossing at least a portion of a first layer and conducting a mechanical embossing step. The Examiner admits that this reference does not explicitly teach applying a wear layer before foaming or mechanical embossing. However, the Examiner believes that the Japanese reference teaches a surface treated layer may be formed on the foam layer before the foaming process. According to the Examiner, it would have been obvious to one of ordinary skill in the art that the surface treated layer would have been subject to wear prior to the foamed layer due to its relative position in the formed laminate, and the fact that it has characteristics of a wear layer. The Examiner also believes that it would have been obvious that the surface treated layer or the second

layer, when present, would be subject to mechanical embossing at the time the first layer or the foamed layer was being embossed.<sup>1</sup>

Further, it is the Examiner's opinion that the Japanese reference teaches the claimed limitations regarding: the relative depths of the chemical and mechanical portions; the step of softening the wear layer prior to mechanical embossing; the mechanical embossing depths; and the step of mechanical embossing without crushing the foam cells. While not specifically taught, the Examiner believes that the claimed softening temperature would have been readily determined through routine experimentation. The Examiner concludes that the foamable layer of the Japanese reference is subject to expansion and curing together.

While Applicants respectfully disagree with all of the Examiner's assertions, for brevity, Applicants' traverse of the section 103 rejection focuses on the relative chemical and mechanical embossing depths. However, this traverse is not meant to imply that Applicants acquiesce to any of the Examiner's assertions not expressly addressed herein.

The present invention is directed to a method of making a surface covering, specifically a floor covering, having a natural and realistic appearance. Applicants have achieved such an appearance by taking advantage of the benefits provided by chemical

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<sup>1</sup> From this assertion, it appears that the Examiner is interpreting the claimed invention as requiring or only being drawn to a mechanical embossing step that occurs at the same time a chemical embossing step occurs. Applicants assert that the invention is not so limited.

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and mechanical embossing. For example, chemically embossing at least one element on the design layer at a depth greater than the mechanically embossed portion enables the floor product to exhibit rounded edges (for grout or joint lines, for example), while mechanically embossing at least a portion of the wear layer allows the floor product to exhibit sharp and shallow textures (common to wood grains and stone, for example). Contrary to the Examiner's assertions, Japanese '123 does not teach or suggest a method of making a surface covering comprising both chemically and mechanically embossed portions in which the chemically embossed portion has a depth greater than any mechanically embossed portion. In fact, as demonstrated below, Japanese '123 teaches away from the invention.

The Examiner relies on the teaching at page 7, second full paragraph to support his assertion that Japanese '123 teaches using an embossing roll having a depth of unevenness as small as 0.8mm. However, the Examiner is incorrectly relying on only one aspect of this teaching, and is ignoring the upper depth of unevenness of 2.0mm. As is well-settled, "[i]t is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art" See, *In re Wesslau*, 353 F.2d 238, 241, 147 U.S.P.Q. 391, 393 (C.C.P.A. 1965). When the full teachings of this reference are considered, one of ordinary skill in the art would reasonably conclude that a depth of unevenness up

to 2.0mm more often than not leads to a mechanical embossing depth greater than the chemical emboss depth, considering the foam layer has a protruding thickness of less than 2.0mm. Both the general teachings of this reference describing a clearance embossing method that does not crush the foam cells at the protruding parts (see, page 7, second full paragraph) and the specific examples in Japanese '123 confirm this.

Despite the Examiner's assertions about the disclosure of Japanese '123, that reference specifically exemplifies decorative products having emboss depths in opposite configurations to the claimed depths. More specifically, Example 2 on page 10 of the Japanese reference teaches a chemically embossed foam material having 0.9mm thick protruding surfaces and about 0.4mm thick recessed surfaces. The depth of the chemically embossed portion is the difference between the thickness of the protruding and the recessed surfaces. In this case, the chemically embossed depth is 0.5mm. Example 2 next teaches that a cold embossing roll was used to mechanically emboss at a depth about 0.8mm, which depth is greater than the chemically embossed depth of 0.5mm, and outside the claimed range.

Example 1 does not provide sufficient information to calculate the exact embossing depths. Nonetheless, assuming the foam layer (0.2mm) is foamed to eight times its thickness (1.6mm) (page 6, second line from the bottom), the results are the same: the mechanical emboss depth (1.5mm) is deeper than the chemical emboss depth (no more than 1.4mm, i.e., the difference between the protruding height of 1.6mm

and the lowest possible recessed height of 0.2mm). The Figures in Japanese '123 confirm this. Specifically, Applicants' position that this reference does not teach or suggest the relative depths associated with the chemically and mechanically embossed portions is further supported by Fig. 3 of the Japanese reference, which illustrates the chemically embossed portions (as represented by numbers 3 and 4) with depths less than the mechanically embossed portion. In view of the foregoing, it is apparent that the Japanese reference not only does not teach or suggest the claimed invention, it in fact teaches away from the claimed invention. It is well-settled that a reference cannot render a claimed invention obvious if it teaches away from the claimed invention. See, *In re Laskowski*, 10 USPQ 2d 1397 (Fed. Cir. 1989). In fact, nothing other than Applicants own disclosure would suggest the invention alleged by the Examiner to be suggested in the prior art. The motivation to modify the prior art must flow from some teaching in the art that suggests the desirability or incentive to make the modification needed to arrive at the claimed invention. *In re Napier*, 55 F.3d 610, 613, 34 U.S.P.Q.2d 1782, 1784 (Fed. Cir. 1995). Furthermore, the Federal Circuit has repeatedly warned that the requisite motivation must come from the prior art, not applicant's specification. *In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 U.S.P.Q.2d 1529, 1531-1532 (Fed. Cir. 1988) ("[t]here must be a reason or suggestion in the art for selecting the procedure used, other than the knowledge learned from the applicant's disclosure."). Using an applicant's disclosure as a blueprint to reconstruct the claimed

invention from isolated pieces of the prior art contravenes the statutory mandate of section 103 of judging obviousness at the point in time when the invention was made. See *Grain Processing Corp. v. American Maize-Prods. Co.*, 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, 1792 (Fed. Cir. 1988).

In addition, beyond looking to the prior art to determine if it suggests doing what the inventor has done, one must also consider if the art provides the required expectation of succeeding in that endeavor. See *Dow Chem.*, 837 F.2d at 473 ("Both the suggestion and the expectation of success must be founded in the prior art, not in applicant's disclosure."). The teachings described above make it clear that the Japanese reference does not suggest the claimed invention nor does it provide an adequate basis for a reasonable expectation of success by exemplifying and illustrating relative depths outside the claimed limitations.

The Federal Circuit in *In re Fine* reversed the Examiner's rejection of obviousness because the prior art relied upon by the Examiner did not appreciate the advantages of the claimed invention. 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). In particular, the primary reference taught a preferred temperature range of 675° to 725°C, which was within the claimed range of 600° to 1700°C. However, the purpose of this range in the reference was different from the claimed purpose. In fact, the court described the overlap of ranges as "mere happenstance" because the purpose of the two ranges were entirely unrelated. *Id.*

The court held that the Board erred in affirming the Examiner's conclusion that the claimed invention would have been obvious, stating that the cited "references disclose, at most, that one skilled in the art might find it obvious to try the claimed invention. But whether a particular combination might be 'obvious to try' is not a legitimate test of patentability." *Id.* at 1075, 5 U.S.P.Q.2d at 1599 (citations omitted).

Assuming, for the sake of argument only, that the teachings of the Japanese reference overlap the relative depths recited in the claimed invention, in the words of the *Fine* court, such an overlapping description would be "mere happenstance." As shown above, this reference does not teach or suggest the relative depths associated with the chemical and mechanical embossing steps, let alone provide the required expectation of successfully developing a method for arriving at these relative depths.

Accordingly, Applicants submit that the *prima facie* case of obviousness is improper and respectfully request that the §103 rejection over the Japanese reference be withdrawn.




IV. Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration of the application and timely allowance of the pending claims. Please grant any necessary extensions of time required to enter this response and charge any additional required fees to our deposit account no. 06-0916.

Respectfully submitted,

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